What is claimed is:

1. A MOSFET for receiving an applied voltage and a gate voltage, the MOSFET comprising,

a first terminal in a semiconductor material,

a gate terminal receiving the gate voltage, the gate being disposed over a channel of the semiconductor material, the gate and channel being curved defined by a gate curvature, the gate being insulated from the semiconductor material, the channel having two channel ends, the two channel ends being nonparallel nonaligned channel ends, the curve of the gate and the channel are noninflecting,

an insulator disposed between the gate and the semiconductor material, and

a second terminal in the semiconductor material, the applied voltage extends between the first terminal and the second terminal, the gate voltage serving to control conduction between the first terminal and the second terminal in the presence of the gate voltage, the applied voltage serving to establish a diverging electric field extending from the first terminal through the channel to the second terminal.

2. The MOSFET of claim 1 wherein,

the gate curvature is defined by a radius extending from a point inside the first terminal.

3. The MOSFET of claim 1 wherein,

the gate curvature of the gate is defined by a radius extending from a point inside the first terminal, the gate curvature is less than a semicircle.

4. The MOSFET of claim 1 wherein,

the gate curvature is defined by a radius extending from a point inside the first terminal, the gate curvature is a quarter circle.

5. The MOSFET of claim 1 wherein,

the gate curvature is defined by a radius extending from a point inside the first terminal, the gate curvature is an eighth circle.

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6. A MOSFET for receiving an applied voltage and a gate voltage, the MOSFET comprising,

a source terminal in n-type silicon,

a gate terminal receiving the gate voltage, the gate being disposed over a channel of the n-type silicon, the gate being insulated from the n-type silicon, the channel having two channel ends, the two channel ends being nonparallel nonaligned channel ends, the curve of the gate and the channel are noninflecting,

an insulator disposed between the gate and the n-type silicon, and

a drain terminal in the n-type silicon, the applied voltage extends between the source terminal and the drain terminal, the gate voltage serving to control conduction between the source terminal and the drain terminal in the presence of the gate voltage, the applied voltage serving to establish a diverging electric field extending from the source terminal through the channel to the drain terminal.

7. The MOSFET of claim 6 further comprising,

a silicon substrate,

a p-type well disposed within the substrate, the source terminal and drain terminal and channel being disposed in the p-type well.

8. The MOSFET of claim 6 wherein,

th curve of the gate is defined by a radius extending from a point inside the source terminal.

9. The MOSFET of claim 6 wher in,

the gate curvature is defined by a radius extending from a point inside the source terminal, the gate curvature is less than a semicircle.

10. The MOSFET of claim 6 wherein,

the gate curvature is defined by a radius extending from a point inside the source terminal, the gate curvature is a quarter circle.

11. The MOSFET of claim 6 further comprising,

a p-type silicon well.

12. The MOSFET of claim 6 further comprising,

a source connector,

a source contact in the source connector for connecting the source connector to the source terminal,

a drain connector, and

a drain contact in the drain connector for connecting the drain connector to the drain terminal, the applied voltage being applied between the source connector and the drain connector.

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13. The MOSFET of claim 6 further comprising,

a source connector,

a source contact in the source connector for connecting the source connector to the source terminal,

a drain connector, and

a plurality of drain contacts in the drain connector for connecting the drain connector to the drain terminal, the applied voltage being applied between the source connector and the drain connector.

14. The MOSFET of claim 6 further comprising,

a p-type silicon well,

a source connector,

a source contact in the source connector for connecting the source connector to the source terminal,

a drain connector, and

a drain contact in the drain connector for connecting the drain connector to the drain terminal, the applied voltage being applied between the source connector and the drain connector.

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15. The MOSFET of claim 6 further comprising,

a p-type silicon well,

a source connector,

a sourc contact in the source connector for connecting the source connector to the source terminal,

a drain connector, and

a plurality of drain contacts in the drain connector for connecting the drain connector to the drain terminal, the applied voltage being applied between the source connector and the drain connector.

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